Author

The primary author of this final rule is Mr. J. Allen Ratzlaff, Asheville Field Office, U.S. Fish and Wildlife Service, 330 Ridgefield Court, Asheville, North Carolina 28806 (704/665–1195, Ext. 229).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, is amended as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. Section 17.12(h) is amended by adding the following, in alphabetical order under flowering plants, to the List of Endangered and Threatened Plants, to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Family name	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
Flowering plants:							
*	*	*	*	*	*	*	*
Arabis perstellata.	Rock cress	U.S.A. (KY, TN)	Brassicaceae	E	570	NA	NA
*	*	*	*	*	*	*	*

Dated: December 12, 1994.

Mollie H. Beattie,

Director, Fish and Wildlife Service.

[FR Doc. 94–32267 Filed 12–30–94; 8:45 am]

BILLING CODE 4310–55–M

50 CFR Part 20

RIN 1018–AC66

Migratory Bird Hunting; Decision on the Conditional Approval of Bismuth-Tin Shot as Nontoxic for the 1994–95 Season

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The U.S. Fish and Wildlife Service (Service) is publishing this final rule to notify the public of the interim conditional approval of the use of bismuth-tin for the remainder of the 1994–1995 migratory bird hunting season. Toxicity studies undertaken by the Bismuth Cartridge Company and other pertinent materials indicate that bismuth-tin shot is nontoxic to waterfowl when ingested.

EFFECTIVE DATE: This rule becomes effective January 3, 1995.

FOR FURTHER INFORMATION CONTACT: Paul R. Schmidt, Chief, or Keith Morehouse, Staff Specialist, Office of Migratory Bird Management (MBMO), U.S. Fish and Wildlife Service, 634 ARLSQ, 1849 C St. NW, Washington D.C. 20240 (703/358–1714).

SUPPLEMENTARY INFORMATION: The Service published a proposed regulation in the **Federal Register** on August 22, 1994 (59 FR 43088) to provide for conditional approval of bismuth-tin shot (in a mixture of [nominally] 97–3 percents, respectively) as nontoxic for the taking of waterfowl and coots during the 1994–1995 hunting season. This proposed action was in response to a petition for rulemaking from the Bismuth Cartridge Company received June 24, 1994. The petition requested that the Service modify the provisions of 50 CFR 20.21(j), to legalize the use of bismuth-tin shot on an interim, conditional basis for both the 1994–95 and the 1995–96 seasons. The petition cited the following reasons in support of the proposal: (a) bismuth is nontoxic; (b) the proposed rule is conditional; and (c) the evidence presented in the record, i.e., the application from the Bismuth Cartridge Company. This petition acknowledged responsibility by the Bismuth Cartridge Company to complete all the nontoxic shot approval tests as outlined in 50 CFR 20.134.

The current petition for rulemaking follows two previous applications to the Service for final approval, one dated October 21, 1993, and the other dated December 30, 1993. The Service replied that the applications were deficient because the bismuth-based shot material had not been adequately tested. Preliminary toxicity testing by the applicants had been with essentially-pure bismuth only. Thus, there was not adequate scientific data (either available or provided with the application) covering toxicity of the material to be loaded into shotshells. The Service pledged in both replies, however, to work with the applicants to process the applications in as timely a fashion as possible.

In response to the Bismuth Cartridge Company's petition of June 14, 1994, the Service proposed (59 FR 43088) the interim conditional approval of bismuth-tin shot based on what was known about the toxicity of bismuth and on the agreement by the Bismuth Cartridge Company to conduct and complete the 30-day acute toxicity test as described in 50 CFR 20.134.

For bismuth, there are three especially recent and relevant studies that support this proposal. The three studies include Sanderson and Anderson (1994), Ringelman et al. (1992), and Sanderson et al. (1992). A complete description of these studies can be found in the proposed rule (59 FR 43088). In addition, test results with tin include those by Grandy et al. (1968) in which there were no deaths associated with mallards dosed with tin shot. Positive results from the acute toxicity test (Sanderson et al. 1994) (just concluded) and the other toxicity information (cited above) suggest that a temporary conditional approval for bismuth-tin can be provided without significant risk to migratory bird resources. The Service believes it has sufficient flexibility in the regulations to approach approval of shot in a step manner.

The toxicity analysis procedures (50 CFR 20.134) consist of three tests which represent the three major categories of toxic effects: short-term periodic exposure, chronic exposure under adverse environmental conditions, and the impact of chronic exposure on reproduction. Tests include both steel-shot and lead-shot control groups and statistical analyses of all data from each test. Test 1 is a short-term, 30-day acute

toxicity study using commercially-available duck food and including blood tests and organ analysis. Test 2 is a chronic 14-week toxicity test in cold weather using a nutritionally-deficient diet, and test 3 is a chronic-dosage study that includes reproductive assessment using a commercially-available duck food diet. For bismuth-tin shot to achieve interim conditional approval, results from test 1 (30-day acute toxicity) must show a finding of nontoxicity to waterfowl. Unconditional final approval will result when the second and third tests are concluded with a finding of nontoxicity.

The Bismuth Cartridge Company contracted with Dr. Glen Sanderson, Center for Wildlife Ecology, Illinois Natural History Survey, to conduct the 30-day (short-term) acute toxicity study. Results from the test indicate that bismuth-tin is not toxic when ingested by waterfowl. As stated in the proposed rule of August 22, 1994 (59 FR 43088), ''. . . this concluding work will be completed before any final rulemaking . . .'' Having received these test results and final report, the Service now issues this final rule providing interim conditional approval to the use of bismuth-tin shot for the remainder of the 1994–1995 migratory bird hunting season.

Since the mid-1970s, the Service has sought to identify shot that, when spent, does not pose a significant hazard to migratory birds and other wildlife. Ingestion of spent lead shot has long been identified as a source of significant mortality in migratory birds. The Service first addressed the issue of lead poisoning in waterfowl in a 1976 environmental impact statement (EIS), and later readdressed the issue in a 1986 supplemental EIS. The latter provided the scientific justification for the ban on the use of lead shot for hunting waterfowl and coots that was begun in 1986 and completed in 1991. Currently, only steel shot has been approved by the Service Director as nontoxic. The Service believes, however, that there may be other suitable candidate shot materials that could be approved for use as nontoxic shot.

In summary, this rule provides interim conditional approval for the use of bismuth-tin shot for waterfowl and coot hunting only for the 1994–1995 hunting season. Further approval will be granted only upon satisfactory completion of the remaining tests required by the Service and the regulations at 50 CFR 20.134, and upon availability of a field detection device to address law enforcement concerns.

Public Comments

The August 22 proposed rule invited comments from interested parties. Closing date for receipt of all comments was September 21, 1994. During this 30-day comment period, the Service received 351 comments. These comments consisted of 2 from Flyway Councils, 5 from Federal agencies, 19 from State fish and wildlife agencies, 23 from other organizations, and 302 from individuals, including a letter signed by 33 Congressmen. A brief summary of those comments is as follows:

The Mississippi and Pacific Flyway Councils both opposed the proposal. The Mississippi Council cited incomplete toxicity testing, enforcement problems caused by lack of a simple field identification technique and the timing of the approval. The Pacific Council stated that ''this expedient action abandons the hard-fought standards set for waterfowling ammunition, fails to consider impacts on law enforcement and education programs, and unnecessarily sets a precedent for special exemptions.''

Four of the Federal agency comments were submitted by law enforcement personnel and opposed the action, primarily on the basis of enforcement problems caused by lack of a non-invasive field method to distinguish bismuth-tin from lead. They suggested further that approving bismuth-tin will provide an additional opportunity for those using lead to go undetected. Comments reiterated the need for the development of a cheap, easy non-invasive field test to distinguish between bismuth-tin and lead. The Canadian Wildlife Service appeared to endorse the action with a statement that the conditional approval of bismuth shot would be consistent with actions taken in Canada. Bismuth is apparently considered nontoxic in Canada since the comment indicated that toxic shot is defined as anything containing more than one percent lead.

Nineteen comments were received that represented 18 States (2 comments from Maryland). Of the 19 comments, 6 endorsed the proposal, 13 opposed it. Opposition came from Arkansas, Colorado, Delaware, Indiana, Kentucky, Minnesota, Missouri, Montana, Washington, and Wisconsin. These comments also raised the issue of enforcement difficulties, incomplete toxicity testing, and concern about timing (delay approval until 1995–96 hunting season). Support for this action came from Louisiana, Maryland, Mississippi, Nevada, and New Jersey.

Organizations were represented by 23 comments. Of the 23 comments, 21 endorsed the proposal and 2 (McGraw Wildlife Foundation and National Wildlife Federation) opposed it. Opposition was based mainly on concerns that ''shortcuts'' were being taken on testing procedures for toxicity and that the process was ''moving too fast.'' Support came from Ontario Federation of Anglers & Hunters, Safari Club International, Arkansas Wildlife Federation, International Association of Fish and Wildlife Agencies, Congressional Sportsman Foundation, National Rifle Association, South Carolina Waterfowl Association, The Wildlife Legislative Fund of America, Catahoula Lake Conservation Club, Alabama Waterfowl Association, Inc., California Waterfowl Association, Sporting Shooters' Association of Australia (Inc.), New Jersey State Federation of Sportsman's Clubs, Inc., Michigan United Conservation Clubs, Ducks Unlimited, The American Outdoorsman Hunting Club, International Joint Commission—Great Lakes, ASARCO, Inc., Smoking Barrel Duck Club, The Bismuth Cartridge Company, and the Sportsman's Council of Central California.

Individuals submitted 302 comments with 299 favoring the action and only 3 opposing it. The comments favoring the approval of bismuth-tin were, in fact, generally anti-steel, restating opposition to steel shot due to such factors as crippling loss and gun-barrel damage. The consensus expressed support of anything that could replace steel.

Response to Comments

Opposition to the regulation focused on 3 major areas: enforcement, toxicity testing, and timing.

1. Enforcement—Concern was expressed in the comments that there is no simple procedure to distinguish bismuth-tin shot from lead shot in the field, creating a burden on law enforcement personnel. The Service recognizes this difficulty and acknowledges that a prescribed field testing method (short of exposing the shot through invasive inspection) to determine shot composition should ideally be in place before approval. In fact, field methods are currently being developed to address this concern. Since resistance to steel shot is promoting a climate for noncompliance, however, it is important to provide an alternative to steel shot that could give the public greater choice during this interim period and improve hunter compliance, thereby reducing the amount of lead shot being used. In addition, increased hunter use of this alternative shot could benefit upland habitats, through the diminished use of

lead shot in those areas. The Service believes that by offering alternatives to steel shot, a climate of compliance will be promoted, not reduced, and that this is a reasonable approach to take while field testing techniques are being developed.

2. Toxicity Testing—Comments expressed concern that testing is incomplete and that testing procedures, clearly defined by regulation are not being followed. The Service stresses that there have been no actions relative to this process outside compliance with 50 CFR 20.134. The Service believes, however, that the regulatory process is sufficiently flexible to provide the opportunity for interim conditional approval of alternatives to steel shot. The applicant has demonstrated a good faith effort to comply with the regulatory procedures defined for toxicity testing and there appears to be no information suggesting a hazard to migratory birds. The Service believes this flexibility can be exercised. The procedures described in 50 CFR 20.134 are in place and interim conditional approval is being granted only after completion of the 30-day acute toxicity test and an independent review of the test results. In addition, the Service has clearly stated that only interim conditional approval has been given and the Bismuth Cartridge Company must still complete all remaining toxicity tests before unconditional final approval is granted for the use of bismuth-tin shot.

3. Timing—Concern was expressed that the hunting season will have begun if/when bismuth-tin shot is approved.The Service regrets that the conditional approval of bismuth-tin had to be delayed until after the start of the 1994-95 hunting season. Although an earlier approval date would have been preferred, the Service was obligated to wait until the acute toxicity tests, analysis of data, and review of the results were completed. The fact that the season has already begun is not considered an adequate justification to delay approval, especially considering the effort put forth to complete the testing and review process as quickly as possible. It was determined that the ''inconvenience'' of approving the use of bismuth-tin shot after the start of the hunting season was outweighed by the opportunity for the hunting public to use bismuth-tin, even if few days remained in the 1994-95 season.

References

Grandy, J.W., L.N. Locke and G.E. Bagley. 1968. Relative toxicity of lead and five proposed substitute shot types to pen-reared mallards. J. Wildl. Manage. 32(3):483–488.

Ringelman, J.K., M.W. Miller and W.F. Andelt. 1992. Effects of ingested tungsten-bismuth-tin shot on mallards. CO Div. Wildl., Fort Collins, 24 pp.

Sanderson, G.C., W.L. Anderson, G.L. Foley, L.M. Skowron, and J.W. Seets. 1994. Toxicity and reproductive effects of ingested bismuth alloy shot and effects of embedded bismuth alloy, lead, and iron shot on game-farm mallards. Final Report, Ill. Nat. Hist. Surv., Champaign, IL. 64 pp. + tables.

Sanderson, G.C. and W.L. Anderson. 1994. Toxicity and reproductive effects of ingested bismuth alloy shot and effects of embedded bismuth alloy, lead, and iron shot on game-farm mallards. 3rd Prog. Rpt., Ill. Nat. Hist. Surv., Champaign, IL. 14 pp. + tables.

Sanderson, G.C., S.G. Wood, G.L. Foley and J.D. Brawn. 1992. Toxicity of bismuth shot compared with lead and steel shot in game-farm mallards. Trans. 57th N.A. Wildl. Nat. Res. Conf., 57:526–540.

NEPA Consideration

Pursuant to the requirements of section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4332(C)), and the Council on Environmental Quality's regulation for implementing NEPA (40 CFR 1500–1508), an Environmental Assessment has been prepared and is available to the public at the Office of Migratory Bird Management at the address listed above. Based on review and evaluation of the information contained in the Environmental Assessment, the Service determined that the proposed action to amend 50 CFR 20.21(j) to allow interim conditional use of bismuth-tin as nontoxic shot for the 1994–95 waterfowl hunting season would not be a major Federal action that would significantly affect the quality of the human environment.

Endangered Species Act Considerations

Section 7 of the Endangered Species Act (ESA), as amended (16 U.S.C. 1531–1543; 87 Stat. 884), provides that, ''The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act'' (and) shall ''insure that any action authorized, funded or carried out . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of (critical) habitat . . .''

Toxicity testing conducted by the Bismuth Cartridge Company indicates that bismuth-tin is nontoxic to the environment; therefore, no adverse impact on endangered and threatened species is anticipated. Pursuant to section 7 of the ESA, MBMO sought review and concurrence that this action ''is not likely to adversely affect'' threatened, endangered, proposed, and category 1 species. Based on review and evaluation of the toxicity testing and other available information, the Service determined that no adverse impact on endangered and threatened species would result from the proposed action. The results of this review may be inspected by the public in, and will be available to the public from, the Office of Migratory Bird Management, U.S. Fish and Wildlife Service, Department of the Interior, Washington, DC 20240.

Regulatory Flexibility Act, Executive Order 12866, and the Paperwork Reduction Act

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601 *et seq.*) requires the preparation of flexibility analyses for rules that will have a significant effect on a substantial number of small entities, which includes small businesses, organizations and/or governmental jurisdictions. The Service has determined, however, that this rule will have no effect on small entities since the shot to be approved will merely supplement nontoxic shot already in commerce and available throughout the retail and wholesale distribution systems. No dislocation or other local effects, with regard to hunters and others, are apt to be evidenced. This rule was not subject to Office of Management and Budget (OMB) review under Executive Order 12866. This rule does not contain any information collection efforts requiring approval by the OMB under 44 U.S.C. 3504.

Effective Date

This rule reflects the interim approval in the text of 50 CFR 20.21(j), by restricting permission to use bismuth-tin for the 1994–95 season. Because this rule relieves a restriction, and the current hunting season ends on February 28, 1995, the Service has determined that there is good cause to establish the effective date of this rule as the date of publication in the Federal Register, as authorized under 5 U.S.C. 553(d) (1 and 3).

Authorship

The primary author of this final rule is Peter G. Poulos, Office of Migratory Bird Management.

List of Subjects in 50 CFR Part 20

Exports, Hunting, Imports, Reporting and recordkeeping requirements, Transportation, Wildlife.

Accordingly, Part 20, Subchapter B, Chapter I of Title 50 of the Code of Federal Regulations is amended as follows:

PART 20—[AMENDED]

1. The authority citation for Part 20 continues to read as follows:

Authority: Migratory Bird Treaty Act, as amended (16 U.S.C. 703 *et seq.*)

2. Section 20.21 is amended by revising paragraph (j) to read as follows:

§ 20.21 Hunting methods.

* * * * *

(j) While possessing shot (either in shotshells or as loose shot for muzzleloading) other than steel shot, bismuth-tin ([nominally] 97–3 percents, respectively) shot or such shot approved as nontoxic by the Director pursuant to procedures set forth in Section 20.134.

Provided that:

(1) This restriction applies only to the taking of Anatidae (ducks, geese [including brant] and swans), coots (Fulica americana) and any species that make up aggregate bag limits during concurrent seasons with the former in areas described in Section 20.108 as nontoxic shot zones, and

(2) Bismuth-tin shot is legal as nontoxic shot only during the 1994–95 season.

Dated: December 22, 1994.

George T. Frampton, Jr.,

Assistant Secretary for Fish and Wildlife.

[FR Doc. 94–32214 Filed 12–30–94; 8:45 am]

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